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Notice of Allowability

Application No.

09/894,199

Examiner

Anh-Vu H. Ly

Applicant(s)

WILLIAMS ET AL.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed February 5, 2007.
2. ☒ The allowed claim(s) is/are 1, 5-8, 10-14, 18, 22-26, 28-34, 36-52, and 55-61 renumbered as 1-47.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kirk D. Williams on April 25, 2007.

The application has been amended as follows:

In The Claims

1. (Currently Amended) A method for adaptively control rates, the method comprising:
receiving a start flow control signal;
receiving a stop flow control signal;
determining a quantitative time duration between said receipt of the start flow control signal and said receipt of the stop flow control signal;
comparing said quantitative time duration to a predetermined threshold to produce a comparison result; and
determining an initial rate for sending information based at least in part on said quantitative time duration and the comparison result.
3. (Canceled).
4. (Canceled).
10. (Currently Amended) A method for adaptively control rates, the method comprising:

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receiving a start flow control signal;
receiving a stop flow control signal;
determining a time difference between the receipt of the start flow control signal and the stop flow control signal; and
exponentially decreasing an initial rate for sending information if the time difference is greater than a predetermined threshold.

18. (Currently Amended) An apparatus configured to adaptively control rates, the apparatus comprising:

a rate controller; and
a timing mechanism;

wherein the rate controller is configured to receive a start flow control signal and a stop flow control signal, to determine a quantitative time duration between said receipt of the start flow control signal and said receipt of the stop flow control signal, to compare said quantitative time duration to a predetermined threshold to produce a comparison result, and to determine an initial rate for sending information based at least in part on said quantitative time duration and the comparison result.

20. (Canceled)

21. (Canceled)

26. (Currently Amended) An apparatus configured to adaptively control rates, the apparatus comprising:

means for receiving a start flow control and a stop flow control signal;

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means for determining a quantitative time duration between the start flow control signal and the stop flow control signal;

means for determining an initial rate for sending information based at least in part on said quantitative time duration;

means for comparing the ~~timing difference~~ quantitative time duration to a predetermined threshold to produce a comparison result; and

means for adjusting the initial rate based at least in part on the comparison result.

34. (Currently Amended) One or more computer-readable media tangibly embodying computer-executable instructions for performing operations for adaptively control rates, said operations comprising:

identifying a quantitative time duration between a start flow control signal and a stop flow control signal;

determining an initial rate for sending information based at least in part on said quantitative time duration;

comparing the ~~timing difference~~ quantitative time duration to a predetermined threshold to produce a comparison result; and

adjusting the initial rate based at least in part on the comparison result.;

42. (Currently Amended) One or more computer-readable media tangibly employing computer-executable instructions for performing operations for adaptively control rates, said operations comprising:

identifying a time difference between a start flow control signal and a stop flow control signal; and

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exponentially decreasing an initial rate for sending information if the time difference is greater than a predetermined threshold.

47. (Currently Amended) A method for adaptively control rates, the method comprising:

determining a timing difference between a start flow control signal and a stop flow control signal;

determining an initial rate for sending information based at least in part on the determined timing difference; and

adjusting the initial rate based at least in part on the result of comparing the timing difference to a predetermined threshold.

50. (Currently Amended) An apparatus configured to adaptively control rates, the apparatus comprising:

a rate controller; and

a timing mechanism;

wherein the rate controller is configured to determine a timing difference between a start flow control signal and a stop flow control signal to determine an initial rate for sending information based at least in part on the determined timing difference, and to adjust the initial rate based at least in part on a comparison of the timing difference to a predetermined threshold.

Allowable Subject Matter

2. Claims 1, 5-8, 10-14, 18, 22-26, 28-34, 36-52, and 55-61 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest determining a quantitative time duration between receipt of the start flow control signal and receipt of the stop flow control signal; comparing said quantitative time duration to a predetermined threshold to produce a comparison result; and determining an initial rate based at least in part on said quantitative time duration and the comparison result, as specified in independent claims 1 and 18.

The prior art does not teach or fairly suggest determining a time difference between receipt of the start flow control signal and receipt of the stop flow control signal and exponentially decreasing an initial rate if the time difference is greater than a predetermined threshold, as specified in independent claims 10 and 42.

The prior art does not teach or fairly suggest means for determining a quantitative time duration between the start flow control signal and the stop flow control signal; means for determining an initial rate based at least in part on said quantitative time duration; means for comparing the time difference to a predetermined threshold to produce a comparison result; and means for adjusting the initial rate based at least in part on the comparison result, as specified in independent claims 26, 34, 47, and 50.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Joung et al (US Patent No. 6,628,613 B1) discloses flow control method in packet switched network.

Ahlfors et al (US Patent No. 7,061,868 B1) discloses method for flow control in a switch and a switch controlled thereby.

Durin et al (US Patent No. 6,581,100 B1) discloses system and method for communication parameter determination.

Peck al (US Patent No. 6,452,903 B1) discloses network switch supporting rate-based and credit-based flow control mechanism on a link-by-link basis.

Peck (US Patent No. 6,466,541 B1) discloses cell pacing on a network link employing a rate-based flow control protocol with underlying credit-based flow control mechanisms.

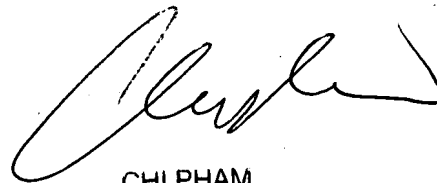
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CHI PHAM
SUPERVISORY PATENT EXAMINER

4/26/08